

Application #09/467,721
Submitted May 30, 2006
Reply to Office Action of November 29, 2005

I. AMENDED LIST OF PENDING CLAIMS

4. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (withdrawn) A method of compression of graphic images which make up a video stream, comprising the steps of:
 - (a) sub-sampling a number of pixel bits from an image selected from said graphic images;
 - (b) run-length encoding repeated instances of said number of pixel bits;repeating steps (a) and (b) until each said number of pixel bits is encoded in an encoded data buffer.
2. (withdrawn) The method of claim 1 wherein the image dimensions are less than or equal to 320 by 240.
3. (withdrawn) The method of claim 1 wherein said number of pixel bits is one of the set of 3, 4, 5, 8, 9, 12, 15, 16, and 24.
4. (withdrawn) The method of claim 3 wherein said number of pixel bits is extracted from the most significant bits of each color component.
5. (withdrawn) An encoded video signal comprising a series of said encoded data buffers, wherein said data buffers were encoded according to the method of claim 1.
6. (withdrawn) A storage medium in which the encoded video signal as claimed in claim 5 is stored.
7. (withdrawn) A method of decompressing an encoded video signal, comprising the steps of:
 - (a) reading a stream of run-length encoded codes;
 - (b) determining a series of pixels based on the values and run-lengths of said codes;

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(c) combining said pixels into an image.

8. (withdrawn) The method of claim 7 further comprising the step of displaying a series of said images.

9. (withdrawn) The method of claim 7 wherein the width and the height of said image are less than or equal to 320 by 240, respectively.

10. (withdrawn) The method of claim 7 wherein said codes represent the combination most significant bits of each of the color components of each pixel.

11. (currently amended) A machine for compressing of a plurality of video frames which make up a video signal, comprising:

(a) a video digitizer configured to digitize a frame from said video frames;

(b) a video memory which is able to receive a plurality of pixels from said video digitizer;

(c) an encoding circuit for counting repeated instances of a pixel value comprising a number of pixel bits sub-sampled from each pixel when scanning said plurality of pixels and outputting a series of encoded data comprising a combined run-length field and a data field;

wherein the data field of each encoded data element comprises a number in the range

from zero to the maximum value of said number of sub-sampled bits, and

wherein the run-length data field of each encoded data element comprises the repeat

count of the value in said data field;

(d) a memory which is able to store said encoded data;

(e) an input/output device.

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12. (previously presented) The machine of claim 11 wherein said encoding circuit variably selects one of a set of 3, 4, 5, 8, 9, 12, 15, 16, and 24, as the number of pixel bits sub-sampled from each pixel wherein the number of pixel bits sub-sampled is less than the number of bits of the pixel being sub-sampled.
13. (original) The machine of claim 12 wherein said pixel value is extracted from the most significant bits of each color component.
14. (original) The machine of claim 11 wherein said input/output device is a storage medium.
15. (original) The machine of claim 11 wherein said input/output device is a communications transmission channel.
16. (withdrawn) A machine for decompressing an stream of encoded data that represents a video signal, comprising:
 - (a) an input/output device for reading said stream of encoded data;
 - (b) a decoding circuit which can decode the encoded data and output a stream of pixel values; and
 - (c) a memory that is able to store an image comprising said stream of pixel values that can be displayed as frames of a video sequence.
17. (withdrawn) The method of claim 1 wherein one or more of the settings of width, height, frame rate, brightness, and contrast of said images are variably altered by a receiver of said encoded data.
18. (withdrawn) The method of claim 1 wherein said number of pixel bits are variably altered by a receiver of said encoded data.
19. (withdrawn) The method of claim 1 further comprising a step of compressing said buffer with a lossless technique known in the art.

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20. (withdrawn) The method of claim 8 wherein said images are enlarged by stretching prior to said displaying.

21. (withdrawn) The method of claim 1 further comprising a step of encrypting said number of pixel bits.

22. (withdrawn) The method of claim 1 wherein said graphic images have a first predetermined frame rate and a subset of said graphic images are sub-sampled at a second frame rate that was less than the first frame rate such that only a subset of said graphic images are selected from the original set of said graphic images, and

wherein said image selected from said graphic images is a sub-sampled image such that it is one of said subset of sub-sampled images.

23. (withdrawn) The method of claim 1 wherein the image dimensions of said video stream is greater than 320 pixels wide and 240 pixels high, and

wherein said method further comprises the step of first dimensionally sub-sampling an image from said graphic images such that the sub-sampled image dimensions of said image are less than or equal to 320 by 240.

24. (withdrawn) The method of claim 1 wherein a length of the encoded data in said encoded data buffer is placed in said encoded data buffer.

25. (withdrawn) The method of claim 7 further comprising the step of reading a length of the encoded data and using said length to determine when all the encoded data has been processed.